DOCUMENT RESUME

ED 427 964 SE 062 264

AUTHOR Lennex, Lesia C.
TITLE "Distance Education for Newbies".
PUB DATE 1999-01-16
NOTE 5p.; Paper presented at the Annual Meeting of the Association for the Education of Teachers in Science (Austin, TX, January 14-17, 1999).
PUB TYPE Reports - Descriptive (141) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Communications; *Distance Education; Higher Education; Internet; *Nontraditional Education; Science Education; *Teaching Methods; *Technology

ABSTRACT

This paper discusses the effectiveness of distance education at Morehead State University. Distance education, which operates via fiber optic telecommunications, has been delivered to as many as 18 sites. Twenty-three faculty and 622 students have participated in this program. The technologies used to present information include full motion video and audio, voice-activated or push-to-talk microphone, and a touch-controlled computer panel. A site facilitator and instructor control the delivery of course content. Internet-based courses are also offered via an Internet classroom assistant called Course Info. Challenges faced by this method of teaching include sending e-mail attachments, reading files, and using the Internet effectively. The paper concludes that the advantages of distance learning overall outweigh the disadvantages. (CCM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 427 964

"Distance Education for Newbies"

Association for the Education of Teachers in Science
International Conference
Austin, Texas January 16, 1999

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
L. Lennex
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Dr. Lesia C. Lennex
Leadership and Secondary Education
Morehead State University
llennex@morehead-st.edu, 606-783-2879

Interactive compressed video has grown rapidly in eastern Kentucky because it is an easily accessible, cost-effective method for course delivery. Morehead State University is a regional university that services the Appalachian region of Eastern Kentucky. The lack of major highways and weather conditions in the region cause it to remain isolated. Aside from the usual mechanical needs of such a class, and the regular equipment updates, it has profited.

Distance education at MSU, which operates via a fiber optic telecommunications system, has grown from one class delivered to seven sites, Fall semester 1995, to more than 29 classes delivered to eighteen sites, involving more than twenty-three faculty members and six hundred twenty-two students. The university utilizes a fully interactive telecommunications system that provides full motion video (compressed) and audio transmission. On-campus and off-campus students interact using either voice activated microphone or a push-to-talk microphone. The instructor aided by a site facilitator at the origination site controls the delivery of course content and communication among sites by using a touch-controlled computer panel. All sites employ a site facilitator who operates the technology, acts as liaison between the students at the remote site and university faculty, and performs class management duties, such as taking attendance, distributing materials, and proctoring quizzes and tests. The instructor makes periodic visits to each remote site in order to establish personal contact with all students. Technologies present at each site include teacher and student cameras, a computer located at the podium for the use of the instructor, student computers, an overhead

SE062264

BEST COPY AVAILABLE

camera for display of class materials and a minimum of two monitors. All class transmitted are videotaped and made available to students.

Compressed video courses are housed in local schools and outfitted with computer stations and electronic podiums. A site facilitator is hired for each course to maintain the equipment and trouble-shoot as necessary. It was estimated in the Spring of 1998 that each class cost approximately $2,500 per site. A maximum of five sites are chosen with a cap of thirty students for the total class size. Each site must have a minimum of five students for a class to broadcast to their location. A traditionally delivered class to MSU's most distant site, which is a four hour one-way drive, would cost approximately $2,900. Such a course would enroll a minimum of eight students. Financially, more students would enroll in the compressed video course, the instructor would not visit the distant sites each week of the course, and university "mileage" costs would decrease. Additionally, students working and living in off-campus areas have commented that the compressed video courses have increased their recruitment and retention. Many of them live within range of other institutions, but choose to attend MSU because it is more conveniently located.

Compressed video is not the only distance learning option at MSU. We also offer Internet based courses delivered via an Internet Classroom Assistant called Course Info. Course Info is owned by Blackboard, Inc. in Washington, D.C. It is a paid service with full benefits to members. If you would like to see a course, please feel free to contact me for additional information. Many instructors who use compressed video will also bring Course Info into their traditional classrooms as well as the compressed video classroom.

Using the resources at hand in these classes can be challenging. I have participated in many training sessions and have undertaken many other independent opportunities to learn multimedia programs. MSU offers training sessions in Course Info and the distance learning classroom. Instructors are taught how to use the electronic podium. It consists of an opaque projector called an "ELMO," sound panels, camera panels, and computer controls. It is quite easy to get the hang of the podium once you've become familiar, but it is recommended that a facilitator work the podium while one instructs. Several advantages exist with the distance classroom. Among those are the frequent use of multimedia by instructors and students to illustrate focal points of the

course, Internet and computer access to demonstrate ideas, and both opaque and translucent items can be used with the ELMO. The communications advantages are numerous also. Instructors can group e-mail students as well as vice-versa, students have ready access to periodicals and other courses materials without reliance on paper delivery, class discussions can be augmented through threaded discussion boards, students may produce web pages to demonstrate principles, feedback to instructors and students can be immediate, and finally, instructors can maintain virtual office hours! Some of the resources are challenging to students: sending e-mail attachments, reading files, and using the Internet effectively. The following paragraphs address the challenges.

Sending attachments is a sticky situation. If you have a PC and send to a Mac user, then the file is likely mime encoded. This means that the file is just a PC type. Mime decoders are available on the Internet for free. I downloaded mine from America Online. Should students send complex, format rich documents, it can be distressing to see all those lines of code positioned around the real document. Students will become very frustrated if this occurs! My suggestion is to always advise students to send either ASCII files or rich text format files. The RTF files will maintain most of the formatting whereas the ASCII is a text only format. If one has Microsoft Office 98 or Office 97, one can send files with the .doc extension which will be read with all the proper formatting. Even if they are sending from a PC to a MAC or vice-versa. The mime decoder works well for retention of format also. In fact, I've had few problems lately with formatting since many users have now opted for Word 97.

Once mechanics of the document are decided, sending the attachment is easily accomplished through the Internet browser. Depending on the browser, one will see the attachment button either on the toolbar in mail mode or on the e-mail itself. I will not attempt to describe each browser set-up. Several versions exist of the same browser and it would be best to ask the technical wizards in your office to explain where the attachment button is located. If you have Pine e-mail, attachments can be complicated and I suggest that you speak with the information technology folks at your institution.

Reading e-mails requires a download of the file and opening it into the proper program. Most files will save on a PC to the "temp" folder on Drive C. If you have a Mac, then you can choose the location for download. Many browsers will also offer the

choice of download sites. If one is reading a PDF (portable document file) file, then it is necessary to have the free reader. Go to http://www.adobe.com for the free software.

Effective use of the Internet is made much simpler if the instructor maintains a web page for student use. Teaching students how to use a search engine may seem passe', but one will soon find that student do not know how search efficiently. Give students information about Boolean searches and tips with specific search engines. It will increase their productivity and their enthusiasm. I also maintain a site with K-12 teacher resources. Since I teach preservice teachers, they must locate and use online resources such as periodicals, dictionaries, games, and download sites. I also list other sites such as their professional organizations and Internet communication sites.

As one can deduce, I am a fan of distance education. Students have a distinct advantage in such courses because the instructor is much more available for assistance when the student needs it and not when the instructor happens to be in their office. Student are much more comfortable in their own environments when learning. This facilitates comfort and accessibility to information needed to support a course. Drawbacks to using distance education range from the inane to the incomprehensible. Some students may resist the idea to go online for any reason. Others may feel that they are doing too much "work" for a course if you have resources on the Internet and virtual office hours. If you teach a course such as I do, "Educational Methods and Technology," then it is essential to emphasize these skills. If you are thinking about teaching with distance education, I suggest you check out my web site and utilize some of those resources. It is http://www.morehead-st.edu/people/l.lennex/index.htm. Good Luck! ☺